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tent to which facilities in the city still functioned in the post-earthquake period (A.D. 62–79) and about how water management was handled in general in the last years before the eruption of Mount Vesuvius.

#### WATER PIPE SYSTEMS IN THE HOUSES OF POMPEII:

DISTRIBUTION AND USE: *Gemma C.M. Jansen*, Catholic University, Nijmegen

Although Roman aqueducts have been researched for many years and recently the distribution of the main water lines has been investigated in various ancient cities, no attention has been paid to the layout, distribution, and function of the water pipe system inside private houses and to the question of what water was used for inside these houses. Pompeii, with its well-excavated houses, offers good opportunities for such an exploration.

During the last few years these unstudied aspects of the water supply system at Pompeii have been the focus of researchers from the University of Nijmegen and engineers from the Technical University of Delft. Because only a few lead pipes have remained in situ, together with 30 bronze taps and 15 lead distribution boxes, it was difficult to obtain a clear picture of the whole system. However, on the basis of small indications (e.g., indentations in the tufo impluvia) and with the help of metal detectors, we have arrived at a reconstruction.

This paper presents the separate elements of the internal network and places them in the context of the pipe system in the house as a whole. I also discuss how the pipe system operated. The reconstruction reveals to what parts of the house the water was directed and for what it was used: to supply the fountains, as drinking water, and for domestic uses.

#### URBAN WATER STORAGE, DISTRIBUTION, AND USAGE IN ROMAN NORTH AFRICA: *Andrew Wilson*, Institute of Archaeology, Oxford University

Models of Roman urban water distribution are usually based on the well-preserved evidence for urban water supply from Pompeii and the literary evidence of Frontinus for Rome, and Roman aqueducts are generally assumed to have worked on the principle of constant offtake. Data from North Africa, however, suggest different arrangements for urban water supply networks in this region of unpredictable rainfall.

Examination of large aqueduct-fed cistern complexes in North Africa reveals a range of functions—as settling tanks, regulating reservoirs, and as storage chambers to which people might resort to draw water through openings in their vaults. Abundant evidence for sluices and stopcocks suggests the creation of reserves to balance supply against demand and to cope with drought.

Water distribution networks frequently lack intermediate pressure towers, and at some sites (Volubilis and Timgad) users drew water directly from the main conduit without a distribution *castellum*. Evidence from Volubilis and Djemila suggests the use of stopcocks to switch supply on or off at the point where it enters a house.

Different qualities of water were rationally used for ap-

propriate purposes, with poorer quality water used for industrial processes or watering gardens, and better water reserved for drinking. Combined use of wells, cisterns, springs, and aqueducts with reservoir complexes suggests a multifaceted approach to the risk of drought.

#### SESSION IIIB: ROMAN ARCHITECTURE: SYMBOLISM AND CONTROVERSY

##### EXCAVATIONS IN THE AREA OF SACRA VESTA: FINAL REPORT: *R.T. Scott*, Bryn Mawr College

A final month of excavation was carried out this past summer in the north wing of the Trajanic Domus Virginum Vestalium to confirm the long (seventh century B.C.–17th century) chronological sequence that has now been established in the area and to improve our knowledge of a principal east–west artery of presumed Late Archaic date that traversed the lower slope of the Palatine and terminated at either end in approaches leading up to the summit of the hill. We had been tracing it, as circumstances allowed, from west to east since 1988; and in 1995 the eastern approach was uncovered by University of Rome excavators working under the supervision of Paolo Carafa in an area not far from the place where we had located but not explored a portion of the street in 1993.

Checking of the chronological sequence was more successful than the search for additional, more substantial remains of the street, which investigation revealed to have been removed or rendered inaccessible by the deep Imperial foundations. Survey by total station, however, confirmed its projected course east to the junction with the uphill ramp. Its course overall suggests that on the east it should be associated in part with houses being reexamined by the University of Rome, while on the west it appears to have marked the southern limit of the sanctuary and sacred grove of Vesta.

##### TEMPLUM PACIS: THE SURVIVING ARCHITECTURE RECONSIDERED: *James Packer*, Northwestern University

Two fundamental articles publish the excavated antiquities of the Forum of Peace in Rome: *BullCom* 65 (1937) 7–40; *BullCom* 86 (1956–1958) 119–42. Only a limited number of other relevant materials survive in the city archives of Rome—although measurements on the original drawings render legible the occasionally indecipherable reproductions of the published versions. Examination of these figures and the other existing evidence thus suggests an explication and revision of the famous Colini/Gismondi reconstruction of the complex.

The high stone fire wall around the Templum Pacis resembled that of Augustus's Forum. The east and west Corinthian colonnades had red granite shafts, high attics, flat roofs, and aedicula. Behind each were two rectangular recesses (the northeast one built into the medieval Tor de' Conti). The unfluted Africano columns *en ressaute* on the north side of the Forum were probably the prototypes for the neighboring "Colonnacce" in the Forum Transitorium.